

Remarks

The non-final Office Action dated December 18, 2007 lists the following rejections: claims 1-6 and 13-19 stand rejected under 35 U.S.C. § 102(b) over Tichauer *et al.* (U.S. Patent No. 6,362,690); claims 1-2, 13-15 and 20 stand rejected under 35 U.S.C. § 102(b) over Shibamura *et al.* (U.S. Patent No. 6,556,815); and claims 7 and 9-10 stand rejected under 35 U.S.C. § 103(a) over Tichauer. Claims 8 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Applicant respectfully traverses the § 102(b) rejections because neither the Tichauer nor the Shibamura reference qualify as prior art under § 102(b). The priority date of the instant application is December 12, 2002 via U.S. Provisional Application No. 60/432,896, which is believed to correspond to the instant application. The Tichauer reference issued on March 26, 2002, which is less than one year prior to Applicant's priority date. The Shibamura reference issued on April 29, 2003, which is after Applicant's priority date. Thus, since neither the Tichauer nor the Shibamura reference was published more than one year prior to December 12, 2002, neither reference qualifies as prior art under § 102(b). Accordingly, the § 102(b) rejections are improper and Applicant requests that they be withdrawn.

Applicant respectfully traverses the § 102(b) rejection of claims 1-6 and 13-19 because the cited portions of the Tichauer reference do not correspond to the claimed invention which includes, for example, aspects directed to turning on and off first active devices of a driver stage of the amplifier circuit and second active devices of an output stage of the amplifier circuit as a function of the forward signal level and the reflected signal level. The Office Action improperly relies upon Tichauer's teachings relating to turning off amplifier stage 202 (*i.e.*, the asserted second active devices) responsive to temperature information in asserting correspondence to these aspects of the claimed invention. *See, e.g.*, Figure 2 and Col. 4:63 to Col. 5:5. The claimed invention requires that the first active devices and the second active devices be turned on and off as a function of the forward signal level and the reflected signal level, not as a function of temperature as taught by Tichauer. Applicant notes that the cited portions of Tichauer also do not teach turning VVA 210 (*i.e.*, the asserted first active devices) on and off in

response to the temperature information. Instead, controller 206 controls the gain or attenuation of VVA 210 to vary the power level of the RF input signal of amplifier stage 202. *See, e.g.*, Col. 4:45-55. Thus, the cited portions of the Tichauer reference do not teach turning on and off either the asserted first active devices or the asserted second active devices as a function of the forward signal level and the reflected signal level.

Moreover, the Office Action's assertion that Tichauer's VVA 210 and amplifier stage 202 both inherently include multiple active devices is improper. According to M.P.E.P. § 2112(V), "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art" and "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." In this instance, the cited portions of Tichauer teach that "the active device" of the amplifier stage 202 can be a field effect transistor or a bipolar transistor. *See, e.g.*, Col. 4:30-36. Tichauer's amplifier stage 202 is taught as having one active device (*e.g.*, a single transistor). Thus, it does not necessarily flow from the teachings of Tichauer that amplifier stage 202 has multiple active devices, as "Inherency may not be established by probabilities or possibilities ... The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *See* M.P.E.P. § 2112(V). Accordingly, the Office Action's assertion of inherency is improper.

In view of the above, the cited portions of the Tichauer reference do not correspond to the claimed invention. Accordingly, the § 102(b) rejection of claims 1-6 and 13-19 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 102(b) rejection of claims 3-5, 14 and 16-18 because the cited portions of the Tichauer reference do not correspond to aspects of the claimed invention directed to independently controlling turning on and off each of the first active devices and/or each of the second active devices. As discussed above, the cited portions of Tichauer do not teach that VVA 210 and amplifier stage 202 include multiple active devices. Thus, the cited portions of Tichauer also do not teach independently controlling the first active devices or independently controlling the second

active devices. Accordingly, the § 102(b) rejection of claims 3-5, 14 and 16-18 is improper and Applicant requests that it be withdrawn.

Applicant respectfully traverses the § 102(b) rejection of claims 1-2, 13-15 and 20 because the cited portions of the Shibamura reference do not correspond to the claimed invention which includes, for example, aspects directed to turning on and off first active devices of a driver stage of the amplifier circuit and second active devices of an output stage of the amplifier circuit as a function of the forward signal level and the reflected signal level. The cited portions of Shibamura teach detecting a voltage corresponding to the level of the reflected wave at voltage detection end 3d. *See, e.g.*, Figure 1 and Col. 3:6-26. The detected voltage is inputted to a comparator 5, which compares it to a reference voltage E_r , and the supply voltage B, which is provided to power amplifier 2, is cut off. Thus, the cited portions of Shibamura teach turning power amplifier 2 off in response to the reflected signal level exceeding a certain level, instead of turning on and off the first active devices and second active devices as a function of both the forward signal level and the reflected signal level as in the claimed invention. Accordingly, the cited portions of the Shibamura reference do not correspond to the claimed invention.

Moreover, the Office Action's assertion that Shibamura's first-stage amplifier 2a and next-stage amplifier 2b both inherently include multiple active devices is improper. According to M.P.E.P. § 2112(V), "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art" and "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." In this instance, the cited portions of Shibamura teach that power amplifier 2 is constructed in two stages by first-stage amplifier 2a and next-stage amplifier 2b, and inside power amplifier 2 there is "an amplifying transistor." *See, e.g.*, Col. 2:37-48. Shibamura's power amplifier 2 is taught as having one active device (*e.g.*, an amplifying transistor). Thus, it does not necessarily flow from the teachings of Shibamura that first-stage amplifier 2a and next-stage amplifier 2b each include multiple active devices, as "Inherency ... may not be established by probabilities or possibilities ... The mere fact that a certain thing may result from a given set of circumstances is not

sufficient.” See M.P.E.P. § 2112(V). Accordingly, the Office Action’s assertion of inherency is improper.

In view of the above, the cited portions of the Shibamura reference do not correspond to the claimed invention. Accordingly, the § 102(b) rejection of claims 1-2, 13-15 and 20 is improper and Applicant requests that it be withdrawn.

Applicant respectfully traverses the § 103(a) rejection of claims 7 and 9-10 based upon the Tichauer reference because the Office Action fails to establish a *prima facie* case of obviousness. The Office Action relies upon improper conclusory statements in asserting obviousness, thereby directly contradicting the U.S.P.T.O. guidelines for maintaining an obviousness rejection under KSR (“Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”). See *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (U.S. 2007). The Office Action acknowledges that Tichauer does not disclose the claimed input matching circuit. The Office Action then simply concludes that it would be obvious for the skilled artisan to implement an input matching circuit in Tichauer to reduce power consumption; however, this conclusion is unsupported by any rationale in the cited references. The Office Action also has not presented any evidence that the proposed modification would reduce power consumption in the Tichauer reference. The statements made by the Office Action amount to no more than conclusory statements of generalized advantages and convenient assumptions about skilled artisans. Such statements and assumptions are inadequate to support a finding of motivation, which is a factual question that cannot be resolved on subjective belief and unknown authority.

Moreover, the Office Action appears to be taking Official Notice that input matching circuits are well known without citing to a prior art reference in support of such an assertion. According to M.P.E.P. § 2144.03, “It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known.” Thus, Applicant requests that the Examiner provide support for the assertion that input matching circuits are well known.


In view of the above, the Office Action fails to establish a *prima facie* case of obviousness. Accordingly, the § 103(a) rejection of claims 7 and 9-10 is improper and Applicant requests that it be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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